Social Sustainability in the Food System:
Examining Innovative Local Government Plans

An Honors Thesis presented to complete the degree Bachelor of Science in Environment and Natural Resources with Honors Distinction at the Ohio State University

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I. Overview

The research presented here seeks to understand the state of social sustainability within local government food system plans[1]. Utilizing an analysis of innovative plans that address food systems from four different local governments allows an understanding of whether the alternative agrifood movement's (AAMs) call for sustainability is being adopted and prioritized within the processes and institutions of local governments. Plans act as both a vision and guiding document for communities, and therefore are a useful indicator of local government's use of the concept of social sustainability. To date, there is limited research and analysis of food systems planning at the local government level and no known work examining social sustainability in these plans. This research offers a framework and evaluation approach, while examining the state of food systems planning.

I begin this paper by first introducing problems within the conventional food system, as they exist in the context of the United States, which have caused response of civil society loosely know as the alternative agrifood movement. I then review academic literature that examines and theorizes both these issues and the response. Next, I trace the recent increase of local government activity aimed at addressing these food systems issues, which sets up the research question and objectives of this paper. I then review and synthesize existing research that informs the conceptual framework, which is developed through an expansion of McKenzie's (2004) definition of social sustainability. The data utilized for this paper is then introduced, followed by an explanation of the methodology, including the expanded conceptual framework. This is followed by the results, conclusion and recommendations.

[1] By food system we mean the inter-connected network of activities, resources, industries, public and private stakeholders, and policies that play a role in the production, processing, and distribution, consumption and waste disposal of food (Neuner, Kelly & Raja, 2011).

II. Introduction

Over fourteen percent of households in the United States (US) are food insecure. That accounts for almost 50 million people who lack economic or social access to the food needed to live a healthy, balanced life (USDA, 2013). At the same time, small and midsized farms have been under pressure for the past 40 years from an economic and political system that champions large-scale commodity production (USDA, 2012). These account for two of the largest problems within the current food system.

Civil society responses to issues of the current food system, including food insecurity and agricultural viability, are widespread and varied (Allen et. al, 2003). These responses, known loosely as the alternative agrifood movement, have appeared in many places with ideals of creating a just and sustainable food system (Constance, et. al, 2014). The AAM embodies community efforts and practice that seek to change the food system. Community efforts such as farmers' markets and food policy councils are on the rise. The number of US farmers' markets almost doubled from 2006 to 2014 (USDA, 2014). The number of food policy councils in America, which are bodies that aim to organize community stakeholders to create and support food systems work, has increased dramatically in the past decade (Scherb et al, 2012).

Local governments are also working through planning and policy, which is evidenced by a recent survey that illustrates widespread adoption of food-related policies (Goddeeris, 2013). Although local government planners' engagement in food systems has been a relatively late addition to the movement, planning has seen a large increase of engaging in food systems issues over the past two decades (Raja, Born, Kozlowski Russell, 2008). Plans can serve a variety of purposes for a community, including providing a vision, blueprint, land use guide, remedy, response to mandates, or pragmatic action to address community needs or even serve as process

(Baer, 1997). Within these purposes, there is the commonality across all plans of outlining a future direction for the community. Food system issues can be addressed by all of these purposes, especially within visioning and outlining a remedy to problems. Plans often articulate goals, policies and strategies for a community. Goals serve as a broad outline of the intended outcome (Bunnel & Jepson, 2011). Policies are statements that guide local government's decision-making, and their intentions for addressing issues of public concern. Strategies are the mechanisms for achieving goals; they constitute the process to achieve an outcome (Bunnel & Jepson, 2011).

The integration of the food system within plans can occur in a few ways. Local governments' comprehensive plans can include aspects of the food system within separate sections. These sections are commonly the agricultural and natural resources, environmental stewardship, energy, and health sections (Neuner, Kelly & Raja, 2011). Some comprehensive plans integrate the food system across the entire plan, where applicable. There are also food system specific plans, which are relatively new and uncommon; these plans solely focus on the community's food system, through assessing issues, setting goals and making recommendations (Neuner, Kelly & Raja, 2011). This research will focus on this specific response related to the AAM, food systems planning, to examine local governments' utilization of the concept of social sustainability within these communities' food systems work.

III. Research Question

This research seeks to examine the question: *To what extent are local governments utilizing concepts of social sustainability within food systems planning?* This question is explored through the development of a conceptual framework of social sustainability within food planning that is applied to four innovative local government plans.

IV. Research Objectives

I. Create a framework and coding structure that synthesizes and translates academic theory to practice of social sustainability in local government food system plans.

II. Evaluate the use of social sustainability within the goal, strategy and policy language supported within food system plans of four innovative local government plans.

V. Existing Research

There are many frameworks that have been developed to understanding the issues and potential solutions of the food system. One of the most prominent frameworks, community food security, is based on ideals of justice, equity and democracy and seeks to connect underserved populations and local agricultural production. A common definition is "a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance, social justice, and democratic decision-making" (Bellows and Hamm, 2002). Community food security literature can be seen as a framework for food systems based in social ecological theory (Johns Hopkins Center for a Livable Future, 2015). Social ecological theory places emphasis on the interconnectedness of an individual and their social and environmental context (Sallis et. al, 2008). In this way, community food security can be seen as a framework of understanding and relating the experience of food insecurity to the environment in which a community is able, or unable, to access food.

Another prominent framework used to understand the US food system is that of food justice. Food justice highlights the lenses of race and class as instrumental to understanding issues of the food system (Alkon and Agyeman, 2011). This framework stems from environmental justice as a lens for understanding why environmental degradation occurs at a

higher proportion in communities of color. Food justice, through the theory of structural racism, relates the issue of food access with historic and systemic racial and class-based inequalities and oppression. Access to healthy, locally produced food is often seen as a main tactic within food justice narratives for achieving sustainable food systems.

Community food security and food justice are two concepts that demonstrate popular ways of framing issues and potential solutions in US food systems. These, along with other frameworks such as civic agriculture, sustainable agriculture and food sovereignty, are present in the academic literature related to the AAM. These frames for action, although varied, share the goal of constructing a more sustainable food system (Allen et. al, 2003). The concept of sustainability is often thought of as the balancing of three different realms: social, environmental and economic. However, even though many argue that the conception of environmental and economic sustainability can only exist within the context of the social, common understandings and definitions of social sustainability are relatively scarce (Dillard, Dujon and King, 2009). Some generally equate the term with equity while others, especially within business disciplines, conflate social sustainability with charity or philanthropy (Dillard, Dujon and King, 2009).

A working definition, put forth by a group at Portland State University, is that social sustainability is both

(a) the processes that generate social health and well-being now and in the future, and

(b) those social institutions that facilitate environmental and economic sustainability now and in the future.

This tendency to focus on processes and institutions is distinct from economic and environmental sustainability (Dillard, Dujon and King, 2009). Indicators of social sustainability, according to McKenzie (2004), include:

1. Equity of access to key services (including health, education, transport, housing and recreation);
2. Equity between generations, meaning that future generations will not be disadvantaged by the activities of the current generation;
3. A system of cultural relations in which the positive aspects of disparate cultures are valued and protected, and in which cultural integration is supported and promoted when it is desired by individuals and groups;
4. The widespread political participation of citizens not only in electoral procedures but also in other areas of political activity, particularly at a local level;
5. A system for transmitting awareness of social sustainability from one generation to the next;
6. A sense of community responsibility for maintaining that system of transmission;
7. Mechanisms for a community to collectively identify its strengths and needs;
8. Mechanisms for a community to fulfill its own needs where possible through community action;
9. Mechanisms for political advocacy to meet needs that cannot be met by community action.

This set of indicators illustrates how social sustainability is a broader framework that allows a wider focus for achieving goals of just and equitable food systems than other popular frameworks, such as community food security and food justice, which may focus solely on access or actions to address inequity as a means to achieving sustainability.

VI. Data

A. Growing Food Connections

The data for this research is from a national project, Growing Food Connections (GFC), which is working through research, planning and policy and education to connect local small and mid-sized farmers to underserved residents. GFC works specifically with two types of communities: Communities of Innovation (COIs) and Communities of Opportunity (COOs). Communities of Opportunity will receive technical assistance and other resources developed from GFCs examination of COIs to improve both food access and agricultural markets within the community. By strengthening the capacity of local governments within COOs to create and implement food systems plans and policies, the project aims to improve food access for underserved residents while also building a more viable agriculture sector within the community.

The larger GFC research team identified four COIs as leaders of food systems policy and planning. My research utilized the plans of the local governments of these communities as the subject of the content analysis. COIs are those that have been successful in building local food systems, through policy and planning, that work to address food insecurity and agricultural viability. As addressed in the parent proposal of GFC, COIs must meet the following criteria:

- Policy initiative(s) must address the problem of food access
- Initiatives must explicitly address food insecure populations
- Initiatives must explicitly address the viability of local and regional agricultural sectors
- The initiative must be led, or explicitly supported, by a local or regional government, including towns, cities, counties, and regional governments
- The policy initiative must have been in existence for one to five calendar years.

My research specifically examined the local government plans of the COIs. As these communities are recognized as leaders within food systems planning, assessing their plans can serve as an indicator of the state of the leaders in the adoption of social sustainability. The four communities recognized as COIs were Seattle, Washington; Lawrence, Kansas; Marquette County, Michigan; and the "Region 5" in Minnesota of Cass, Crow Wing, Morrison, Todd and Wadena Counties.

B. Site Descriptions

Seattle, Washington

Seattle, Washington is located in the Pacific Northwest of the United States, and sits at the heart of the Puget Sound Region on the Pacific Ocean. Seattle and the surrounding areas have a long history of agriculture, through both specialty crop production and community gardening. Recently, there has also been an increase in public-private partnerships around community farming, programming and job training. The historic presence of many immigrant communities in Seattle has led to the development of many ethnic and cultural markets. This infrastructure has produced good access to culturally appropriate and healthy food for most of the city. However, currently this access is largely dependent on car ownership and, as a result, income level and related poverty rates (Table 1).

Table 1: **Statistics of Plan Locations (Median Income, Poverty Rate, Race/Ethnicity Distribution and Educational Attainment)**

STATISTIC	***Seattle,*** *Washington*	***Lawrence,*** *Kansas*	***Marquette Co,*** *Michigan*	***5 Co Region,*** *Minnesota*
Population, 2012	634,535	89,512	67,358	162,655
Median Household Income	$63,470	$44,713	$ 45,622	$44,336
Poverty Rate	13.2%	23.0%	15.7%	12.9%
Race/Ethnicity Distribution				
White alone	69.5%	82.0%	93.5%	94.6%
Black alone	7.9%	4.7%	1.6%	0.6%

American Indian alone	0.8%	3.1%	1.8%	2.7%
Asian alone	13.8%	4.2%	0.6%	0.5%
Hispanic	6.6%	5.7%	1.2%	2.1%
Educational Attainment				
High school graduate or higher	92.9%	95.1%	93.5%	89.9%
Bachelor's degree or higher	56.5%	52.8%	29.1%	18.5%

Source: 2009-2013 American Community Survey 5-Year Estimates

Consequently, the City of Seattle has developed many projects, policies and programs to improve food security and support agricultural production. The Local Food Action Initiative Resolution was adopted by the City Council in 2008 established a framework for food related policies and coordinating interdepartmental work on these issues. The Fresh Bucks Program matches up to $10 spent at participating farmers' markets by Supplemental Nutrition Assistance Program (SNAP, often referred to as "food stamp") participants. The Farm to Table Partnership Project connects senior meal and childcare programs with local farms, and provides training for implementation of these alternative-purchasing models.

The Seattle Food Action Plan, which is the data source for this project, is a food system plan adopted in 2012 that focuses on describing goals and strategies for the city to create a healthy food system. The four main goals, as listed in the plan are: for all Seattle residents to have access to healthy food, to strengthen the local economy, to prevent food waste, and to make growing food locally easy. The plan then lists a number of strategies for each goal and recommendations for each strategy. The plan was created by the Food Interdepartmental Team, which utilized a series of listening sessions with Seattle residents to identify main priorities.

Lawrence, Kansas and Douglas County

The City of Lawrence sits within Douglas County in Kansas, a Midwestern state within the US. There is a strong agricultural presence and history within the county. While the vast majority of agricultural production is of commodity crops such as soybean, corn, and wheat,

there are a growing number of specialty crop producers. There are numerous urban farms, and urban agriculture projects within Lawrence. Local food sales have increased recently, due to a large increase in the number of vendors at the Lawrence farmers' market and two regional markets. However, farmers face barriers in pursing direct market opportunities due to the lack of infrastructure for processing, aggregation, packing and distribution. There are currently no facilities or businesses that provide these services within the city or county. This keeps local, fresh produce prices high, creating difficulties for consumers and institutions that want to purchase locally. Both this, and the geographic concentration of grocery stores in Lawrence limit access to fresh healthy food to those who have access to a car. Countywide SNAP participation is also very low, at about 27% of eligible people receiving benefits, while the poverty rate is 23% (Table 1).

Douglas County and the City of Lawrence have partnered together on policies and programs to address these challenges and opportunities. A Sustainability Coordinator position was created and coordinates a joint city/county food policy council. The Common Ground Agricultural Program leases vacant city-owned land for agricultural uses in return for lessees providing a plan that details how the use will benefit the community. The SNAP Match Program matches dollar-for-dollar benefits utilized at the regional farmers markets. The Horizon 2020 Plan, which is the data source for this project, is a joint city/county comprehensive plan. The food system is addressed within sections Growth Management (Chapter 4) and Environment (Chapter 16). The main goals related to food include preservation of farmland and rural character, protection of high quality agricultural land and soils, supporting the Douglas County Local Food Policy Council, support development of local/regional food programs. The comprehensive plan is a living document, in that it is utilized and has been added to consistently

by Douglas County and the City of Lawrence over the span of its life. It is currently in a community review process, which includes a reworking of sections to include food systems language through the plan.

Marquette County, Michigan

Marquette County is located on the northern coast of the Upper Peninsula (UP) of Michigan within the United States. The population of just about 67,000 is mostly white and the area includes Chocolay Township and the City of Marquette (Table 1). The region's land is relatively affordable for land prices in the US and hasn't been overly farmed. There's also a strong demand for local food, especially in population centers. However, local production is challenged by the limited growing season (June through September), rocky outcroppings in the northern part of the County, and subjection to drought conditions. Producers also have difficulty in transporting products to market as the county's population is relatively dispersed, with few population centers. This is also a barrier for consumers, and food access is largely dependent on car access. There are no processing facilities in the region, which might provide an opportunity to extend the local food supply into the winter months, except for a single processor for beef and pork. Institutional purchasing barriers, especially price ceilings for the bid process and the requirement of Good Agricultural Practice (GAP) certifications, prevent new markets for farmers who currently produce similar crops and therefore compete for the same limited markets. There are six farmers' markets in the county, some accept Electronic Benefit Cards (EBT), the system for utilizing SNAP benefits, and have double up programs, however limited production and the dispersed population creates challenges for the markets.

There are a number of programs that are trying to address these challenges. The Upper Peninsula Food Exchange Food Policy Committee is a collaborative group that has

representation from both governmental and nongovernmental agencies. Their work has included developing three regional food hubs and holding annual conferences to connect stakeholders. Chocolay Township have recently started a community garden, and allotted 14 acres owned by the County to be utilized for public agricultural use. Marquette City established a Commercial Rehabilitation District that abates taxes for the expansion of the Food Co-op.

The Local Food Supply Plan, which is the data source for this research, was adopted in September of 2013 as a part of the Marquette County Comprehensive Plan. The chapter's vision is to create a "local food system in which agriculture is a valued and viable occupation that enhances the local economy, improves the health of residents and increases food security." This visioning then guides goals and policies of the chapter. The chapter has been utilized to draw attention and inform decision makers of the importance of food systems issues. The Marquette County Planning Commission, who developed the plan, is largely in charge of implementation.

Region 5, Minnesota: Cass, Crow Wing, Morrison, Todd and Wadena Counties

Region 5 is comprised of an area that covers five counties in North Central Minnesota: Cass, Crow Wing, Morrison, Todd and Wadena. The region includes many small towns and a total population of 162,655 and just under 4 million acres of land (Table 1). There are 65 incorporated cities, 155 townships, 24 school districts, one community college and one tribal band: The Leech Lake Bank of Ojibwa. Part of the regional is very rural, and two of the counties (Todd, Wadena) are some of the poorest in the state, while the overall poverty rate is 12.9% (Table 1). Crow Wing and Cass Counties make up a majority of the region's population and growth. Three of the five counties are in the bottom ten percent of health standings in the state.

The majority of the region's farms are 40 acres or less in size, and producing primarily fresh produce, cattle and turkeys (Creating a Resilient Region). Key challenges are the short

growing season, lack of processing infrastructure, widely dispersed markets, and health and economic disparities. However, there are a number of ongoing local programs led by the local governments to address these issues. The most notable is the Region 5 Development Commission's (R5DC) program, "Choose Health," that expands access to locally grown foods to food insecure families through a doctor-prescribed Community Supported Agriculture (CSA) program. Comprised of over 40 low-income growers, the CSA's also reaches 30 families who participate through their employer's wellness program.

The data source for this research, Creating a Resilient Region: The Central Minnesota Sustainable Development Plan, is a comprehensive plan that was adopted in 2012. The planning process was funded through the Sustainable Communities Regional Planning (SCRP) Grant Program, which is a partnership of the U.S. departments of Housing and Urban Development, Department of Transportation and the Environmental Protection Agency. The plan integrates areas of housing, transportation, natural environment and economic development, with food systems concerns within the environment, economic and health areas. Main proposed "action steps" include educational work around healthy choices, incentivizing agricultural uses for land, develop distribution systems, explore value-added options for foods, grow demand of locally produced goods and increase agricultural training and education. Over $35 million has been leveraged for the purpose of implementation, which is ongoing.

VII. Methodology

A. Qualitative Content Analysis

I conducted a content analysis of each of the four plans reviewed in the previous section. The literature review of social sustainability directly informed the coding structure for the content analysis of COI plans. This work followed the method of a directed qualitative content

analysis, which uses existing theory and prior research to analyze the data and discuss findings (Hsieh and Shannon, 2005). It also utilized the method of a summative approach to content analysis, which codes for specific phrases and words to understand patterns and context of code use. My research blended these two methods of qualitative analysis, coding for phrasing and words as well as evidence of underlying theories that inform the works of the COIs. I utilized NVivo software, a qualitative data analysis software package, to sort, organize and classify the plans according to the coding structure of the theoretical framework. The analysis uses similar structure and process as those done through the American Planning Institutes' research on plans, such as "Healthy Planning" (Ricklin & Kushner, 2012), which evaluated a set of relevant plans on their inclusion of public health concepts.

The conceptual framework below is an outline of the concepts and indicators coded for within each of the four plans. These concepts were also coded by whether they appeared as a goal, policy or strategy to understand how the concept was being utilized. First, I read the plans, starting with Seattle, then Lawrence, Marquette and Region 5, which informed by coding structure as I expanded and provided examples of indicators which could be found within these local government plans. Then I started coding, in the same order, this time within NVivo. I marked identifiable goals, policies, and strategies within the plan as they represented or demonstrated a specific concept of the framework. After finishing an initial round of coding, I reviewed across plans to ensure uniform application and understanding of the framework. I then tallied the concepts by plan, then the concepts by goal, policy or strategy. I then compiled these to compare distribution of code within the plans by concept and by goal, policy, or strategy.

B. Conceptual Framework

The basis of the coding structure was an expansion of the McKenzie's (2004) concept as related to food systems. The coding structure, below, outlines the nine concepts and indicators of social sustainability in food system planning.

1. **Equity of access to key services (including health, education, transport, housing and recreation);** In the frame of local food systems, access to key services can mean many things that affect how people and communities access local and healthy food, and the system that produces, transports, processes, distributes, and sells this food. Local government can regulate and support this in many ways. Both food justice and community food security utilize this concept as a primary basis for achieving sustainable food systems. Examples include:
    a. Funding and programs that institute access to affordable healthy food through farmers' markets, community gardens, and/or healthy corner store initiatives.
    b. Improvements to public transportation options to expand access to grocery stores and/or other food retail.
2. **Equity between generations, meaning that future generations will not be disadvantaged by the activities of the current generation;** This concept speaks to a well-recognized facet of sustainability, that of a generational time frame. Therefore, this concept is concerned with policies that ensure enduring change. This indicator looks to efforts that are proactive and lasting for food system viability. Examples include:
    a. Policies that support for the preservation of agricultural land.
    b. Maintenance of markets for farmers, including institutional markets and procurement policies.

3. **A system of cultural relations in which the positive aspects of disparate cultures are valued and protected, and in which cultural integration is supported and promoted when it is desired by individuals and groups;** This indicator speaks to the idea of cultural sovereignty, which especially for local governments revolves around recognition of historic, structural, systemic and cultural oppressions that exist differently in each community. Recognition of difference and the importance of this within food systems is also key to the theory of food justice, in the nature of understanding systemic realities of the food system in order to build a sustainable food system. As led by local government, these efforts can look like:
    a. Support and prioritization of minority and immigrant communities in land access, food production and access to culturally appropriate food.
    b. Community gardens and instructional programs that focus on passing on, preserve and facilitate local knowledge of food.
4. **The widespread political participation of citizens not only in electoral procedures but also in other areas of political activity, particularly at a local level;** Food systems work can involve a range of policy and planning efforts, in which community involvement and ownership is necessary for success. A primary example of this is:
    a. Food policy councils, especially those that seek wide participation and representation from the community along the entire food system (consumers, producers, distributors, minority communities, businesses, etc.).
5. **A system for transmitting awareness of social sustainability from one generation to the next**; Local processes must have root and structure to ensure long-term viability. Food systems issues are complex, multi-faceted and involve many stakeholders. Local

governments can provide space and structure to ensure that solutions and the building of sustainable food systems are continuous and on-going. Examples include:

a. Educational programs that engage students of all ages on aspects and issues of the food system: cooking, gardening, nutrition, history, zoning, land access, etc.

b. Celebrations and festivals of local food systems features.

6. **A sense of community responsibility for maintaining that system of transmission;** Community ownership of process and programing is important, and can be highlighted within food systems work, especially through educational programming and cultural celebrations.

   a. Funding and support of educational programing facilitated by community agents/organizations.

   b. Support for bodies of community members, such as school boards, unions, or other organizations, that have ownership over programming and food systems processes.

7. **Mechanisms for a community to collectively identify its strengths and needs;** This indicator revolves around process; it is necessary for a community to identify, understand, and analyze its own needs. These social structures can help create a community that is able to recognize assets as well as deficits in their food system, which is crucial for a community's ability to adapt and respond as a growth and change occurs. Support from local government can be seen in:

   a. Food mapping projects that identify neighborhood food systems features or food insecurity within the community through inclusive and democratic processes

8. **Mechanisms for a community to fulfill its own needs where possible through community action;** Local governments benefit from the ability of communities to play an active role in problem identification and solving. This concept also relates heavily to the basis of community food security's basis of "self-reliance" within a sustainable food system. Through policy, programming and financial support (especially through use of local government purchasing power) local governments can support the local food systems:
    a. Creation of policy, such as easing urban agricultural zoning regulations, as a result of mapping and/or community-owned processes.
    b. Support expansion of local food production within private sector, through institutional food purchasing policies for local and sustainable food.
9. **Mechanisms for political advocacy to meet needs that cannot be met by community action.** This indicator largely is about process for communities to advocate for their needs if they are not being met. In term of food systems plans, this is about the creation of structures that allow the community to enact change, especially if previous programs and policies have not worked.
    a. Ensuring process within legislative bodies is both open and responsible to community need.
    b. Establishing recourse for a lack of completion or fulfillment of duties of food systems policies and programing.

VIII. Results

To answer the question, *To what extent are local governments utilizing concepts of social sustainability within food systems planning?* I first present the overall results of the coding

process of the nine social sustainable indicators by plan (Table 2). Equity of access to key services (concept 1) and equity between generations (concept 2) both share a large majority of coding, with totals of 23 and 20, respectively. After these two concepts, the most prevalent amount is within a system for transmitting awareness (concept 5), which totals to nine. Cultural relations (concept 3), political participation (concept 4), collective identification of needs (concept 7), and mechanisms to fulfill own needs (concept 8) all have between four to six codes each. A sense of community responsibility (concept 6) has only one, and mechanisms for political advocacy (concept 9) was not found at all. Each plan had a similar total of code, with 17 to 19, and a complete total of 73 coded goals, policies or strategies within each plan.

Table 2: Distribution of social sustainability indicators by plan

Indicator	Seattle, Washington	Lawrence, Kansas	Marquette, Michigan	Region 5, Minnesota	Total
1. Equity of access to key services	6	4	7	6	23
2. Equity between generations	6	8	3	3	20
3. A system of cultural relations	1	1	2	1	5
4. Widespread political participation	2	1	1	2	6
5. A system for transmitting awareness	0	1	3	4	9
6. Community responsibility	1	0	0	0	1
7. Collective identification of strengths and needs	1	1	2	0	4
8. Mechanisms for community to fulfill own needs	1	1	0	3	5
9. Mechanisms for political advocacy	0	0	0	0	0
Total	19	17	18	19	73

Figure 1A-D: Distribution of Concepts by Plan

Figure 1A-D shows the distribution of each plan's code by concept. Concepts 1 and 2, indicated by the darkest blue and red can be shown to create a majority, especially within Seattle, Lawrence, and Marquette. Region 5 has the most even distribution of all of the concepts, while Marquette only covered five of the nine concepts.

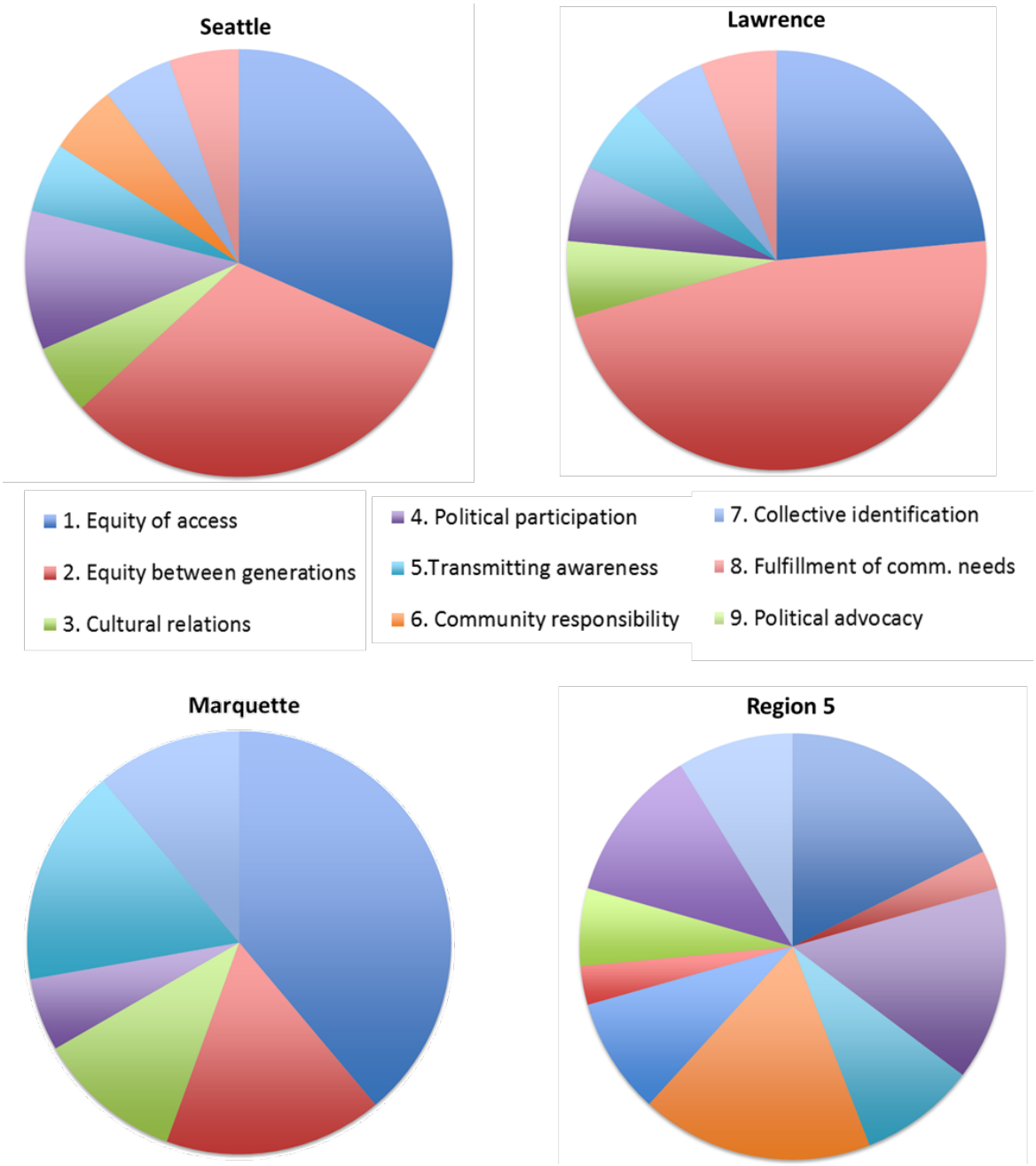

Table 3 shows the number of each goal, policy and strategy coded for within each plan, as well as the total number for each type. The majority of coding was strategies, with a total of 55. Seattle and Region 5 both had higher portion of this total, with 16 and 17 strategies each, respectively. There were only five policies within all of the documents, which all fell within Lawrence. Goals made up 13 total code, within a similar distribution of two to four from each location.

Table 3: Social Sustainability by Goal, Policy and Strategy by Site

Type	Seattle, Washington	Lawrence, Kansas	Marquette, Michigan	Region 5, Minnesota	Total
Goal	3	4	4	2	13
Policy	0	5	0	0	5
Strategy	16	8	12	17	55

Table 4A-I shows a breakdown, by plan, of the distribution of goal, policy, and strategy within each indicator. Each concept follows, fairly closely, with the overall distribution in a predominance of strategies, within each. The breakdown of concept 3, cultural relations, into two goals and three strategies is the only large difference from this. Again, concepts 1 and 2 share the majority of coding within strategies.

Table 4A-I: Distribution of Concepts by Goal/Policy/Strategy & Plan

Table 4A: Distribution of Concept 1: Equity of access to services

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	2	1	1	1	5
Policy	0	0	0	0	0
Strategy	4	3	6	5	18
Total	6	3	7	6	23

Table 4B: Distribution of Concept 2 – Equity between generations

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	1	2	1	0	4
Policy	0	2	0	0	2
Strategy	5	4	2	3	14
Total	6	8	3	3	20

Table 4C: Distribution of Concept 3 – Cultural Relations

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	1	1	0	2
Policy	0	0	0	0	0
Strategy	1	0	1	1	3
Total	1	1	2	1	5

Table 4D: Distribution of Concept 4 – Political Participation

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	0	0	0	0
Policy	0	1	0	0	1
Strategy	2	0	1	2	5
Total	2	1	1	2	6

Table 4E: Distribution of Concept 5 – Transmitting awareness

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	0	1	0	1
Policy	0	0	0	0	0
Strategy	1	1	2	4	8
Total	1	1	3	4	9

Table 4F: Distribution of Concept 6 – Community Responsibility

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	0	0	0	0
Policy	0	0	0	0	0
Strategy	1	0	0	0	1
Total	1	0	0	0	1

Table 4G: Distribution of Concept 7 – Collective Identification

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	0	0	0	0
Policy	0	1	0	0	1
Strategy	1	0	2	0	3
Total	1	1	2	0	4

Table 4H: Distribution of Concept 8 – Fulfillment of community needs

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	0	0	0	0
Policy	0	1	0	0	1
Strategy	1	0	2	0	3
Total	1	1	2	0	4

Table 4I: Distribution of Concept 9 – Political advocacy

Type	Seattle	Kansas	Marquette	Region 5	Total
Goal	0	0	0	0	0
Policy	0	0	0	0	0
Strategy	0	0	0	0	0
Total	0	0	0	0	0

IX. Discussion

The results show a heavy concentration on equity of access to key services and equity between generations. These findings follow the traditional definition of sustainability, which is very much concerned with equity over generational time periods. It also fits into the dominant narrative of food justice and community food security, in that access to healthy, local food is the primary mechanism for creating a sustainable food system. The lack of mechanisms for political action led by a community and a system for community responsibility of social sustainability shows a lack of recognition of conflict, or even failure within the process, as a course or aspect of change in order to create sustainable food systems. In this way, it shows a primary focus on outcomes, rather than process as a means of achieving sustainability.

The lack of concrete policies related to social sustainability translates to a lack of the creation of institutional support. This result could be in relation to the nature of plans, one of visioning and creating a blueprint for moving forward, rather than considering the governance, and therefore the sustainability, of that vision or blueprint.

While Seattle shows a heavy focus on concepts of access and equity, there is some integration of process into their plan. The focus on strategies makes sense as paired with access and equity, in that its concern is primarily with outcomes. This depth and focus on government action may allow them to easily enact the plan, however, the lack of civil society through process-oriented concepts could make adoption and wide-spread support and engagement with the plan difficult.

Marquette's plan contained the least amount of concepts, only engaging with five of the nine. Similarly based in mostly equity and access, their work is again focused on particular and

measurable outcomes. While the local government is set up to achieve progress on these fronts, the integration of the work of civil society is, again, lacking.

Region 5's relatively equal distribution of concepts could be seen as an aspect of the type of the plan, as it is a comprehensive, sustainability plan. The format integrates aspects of the concepts into many different sections focused on issues such as housing, employment and transportation. While there is a specific food section, it still integrated food across the many sections and includes goals and strategies, while addressing both process and institutions. This fairly even distribution of coding over concepts, while lacking policies that might provide a more clear direction forward for the local government, shows a utilization of civil society and process that within this framework predicts the plan will be more readily accepted and applied by the community.

Lawrence, containing all of the policies coded for, may be in a better position to realize the goals, as they've articulated the ways local government will act as evidenced by a heavier focus on policy. However, the lack of integrating the concepts based in process shows an absence of integrating the community demands, to which the plan is responding. This could be an indication that the plan might not be sustainable in terms of its integration and acceptance by civil society that is already engaging in this work, and that the lack of a the development of a shared governance structure leaves the plan without a process for the community to hold the plan accountable to stated goals and policies.

While the concepts of equity and access were well represented, and the presence of many strategies shows many mechanisms for achieving these outcomes, the overall trend of lack of process and integration of civil society presents a space for growth and consideration within planning. The concept of process, as McKenzie argues, is important for the maintenance and

resilience of a plan. If these plans are arising from the call of a just a sustainable food system, there is a large space for engaging, channeling and supporting the work of their communities in order to achieve this goal.

Furthermore, the total absence of concept 9 within all of the plans shows a lack of consideration of conflict as an important and useful tool for growth. As these plans arise from the challenging problems of the food system and voices of civil society, which can be seen as a dimension of conflict, creating space and process for civil society to keep local government accountable and continually moving forward.

X. Recommendations

For local governments aiming to build just and sustainable food systems, considerations of both process, shared governance and institutional support are necessary. In working to address access, equity, and process of engagement of civil society, governments can build plans that provide a way of realizing goals and strengthening community work. The conceptual framework developed within this research can provide a way of thinking through this work and the mechanisms, processes and institutions that are necessary for building a sustainable food system. Through this, community practice and civil society can inform the indicators for a local government's work to make sure application is relevant to the local context. Also, expanding the building of process that recognizes conflict as a useful tool for planning and local government work creates space for wider growth and community engagement.

XI. Limitations

This primary limitation of this research is that it only addresses a limited number of leading food system plans that are not representative of demographics and geographic locations. While this approach enables a description of the state of the art in planning, it does not represent

all food system planning. In addition, the lack of a second coder does provide some limitations in regards to ensuring consistency.

XII. Conclusion

Through this research, I aimed to examine the most innovative local governments' integration of social sustainability within food system planning. With the expansion of a conceptual framework and the application through a content analysis, I found a heavy utilization of concepts of equity and access as means of achieving sustainability. This demonstrates the application of traditional understanding of sustainability throughout the plans (i.e., equity across generations). In addition, these results indicate a focus on outcomes rather than process. While a focus on outcomes may make plans easily deployable and straightforward, it shows that outside of the actual planning process there is a lack of institutionalized and developed mechanisms for community engagement and sustainable, shared governance, and the overall sustainability of the plan over time. As these plans arise from the challenging problems of the food system and voices of civil society, which can be seen as a dimension of conflict, creating space and process for civil society to keep local government accountable and continually moving forward. In order to create plans that utilize the full potential of their community's own food system's work, it is key for planners to recognize the importance of civil society through the development of community oriented process within plans.

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